

# Types of Bee Hives

Contributions by John Farrow, Sarah Heilbron, Tim Knaggs, Gil & Jim McKintire, Sarah Rapley, Mary & Simon Staffurth, & Bridget Tyler, Calista Dickinson. [2013 & 2017]

## British Standard National using 14×12 brood box

**Summary:** Increasingly popular as the brood chamber is large enough for a colony and there are half as many brood frames to inspect compared with a double brood or brood and a half.

This is a photo of 14×12 beehive with one super.

**Pros:** Good sized, single brood chamber

**Cons:** Heavy brood box. Can be damaged by woodpeckers, though protection can be easily achieved by covering in black wheelie bin liners installed under the roof.

No. of cells in brood box: 75,000 (good)



## British Standard National using double brood box

### Member John Farrow's Double Brood Hive

**Summary:** Very popular British hive. The hive stand is a palate cut into two. This minimises lifting and back strain. The stand is long enough for 2 hives or alternatively you can use the RH end to place the upturned roof and supers during inspections.

**Pros:** Flexible system. Double Brood Boxes allow various swarm manipulations such as Demaree & Snelgrove etc....

**Cons:** Two brood boxes to inspect, top brood box can be heavy.

No. of cells in brood boxes: 95,000 (enormous)



## British Standard National using “brood and a half”

**Summary:** Very popular British hive.  
Note the wire mesh to protect the hive from woodpecker damage.

**Pros:** Flexible system

**Cons:** Two brood boxes to inspect, two sizes of frames (due to different sized brood boxes).

No. of cells in brood box: 70,000 (good)

## Previous Member Gil McKintire's Hive



## Commercial

**Summary:** a single brood box, frames (16" x 10") are larger than Nationals.

**Pros:** you only have to hunt an elusive queen over 11 frames instead of 24, compared with a two-brood-box National system. National floors, crown board, supers and roof are identical dimensions. Be aware that Commercial hives are normally bottom space but suppliers will convert this to a top space whose benefits far outweigh bottom ones.

**Cons:** short-lug frames are difficult to hold and handling is slightly slower. Twelve frames can be squeezed into a box but are then very difficult to remove. Much better to stick to 11 and add a dummy board at one end.

The brood box is bulky to lift and move; the hand-holds are small. Some smaller suppliers will not always stock frames and foundation. Note: Ensure you store the large sheets flat! Would I return to the National? Definitely not!

11 frames give a total of 75,000 cells.

## Previous Member Tim Knaggs's Commercial Hives now with an East Sussex backdrop.





## WBC

**Summary:** This is the picture postcard hive but it's the smallest and hence not so practical.

**Pros:** Looks good, double insulation making it cooler in summer & warmer in winter. Brood boxes and supers made out of less substantial wood, so less heavy to lift. Lifts provide a useful platform to rest boxes on during inspections. Less prone to colony loss from woodpecker damage.

**Cons:** Brood box too small - so many beekeepers end up with a double brood system. Most beekeepers avoid this hive as you need to remove the extra layer before the hive can be examined & these layers make manipulations such as Demaree or Snelgrove very difficult. Expensive with a lot of extra woodwork to buy & store.

No. of cells in brood box: 45,000 (small).

## Member Sarah Rapley's WBC Hives.



## Modified Dadant Hive

**Summary:** These are commercial size hives, which means they are much bigger than Nationals. Mary & Simon did not actually choose this type of hive, when they inherited the bees from Simon's father, they were already in Dadants, the rest of the equipment was for Dadants and so they continued to use them. As well as having bigger brood chambers and supers, Dadants are also rectangular.

**Pros:** The brood chamber is much larger so there is no need for the brood-and-a-half or two-brood system that is used to create a bigger chamber on Nationals. The bigger supers with longer frames are good for honey extraction because there is more honey per frame.

**Cons:** Small hand holds & the very short lugs on the frames make lifting both very difficult.

Components are not interchangeable with other hives

Lone beekeepers may find the brood boxes and supers (when full) too heavy to lift.

No. of cells in brood box: 85,000 enormous.

## Members Mary & Simon Staffurth's Dadant Hive.



## Beehaus

**Summary:** Modern plastic beehive, launched in 2009, designed and assembled in the UK.

This is the beehive that would be bought if you lived in the city, lacked space or only wanted one hive.

However this is two hives in one, with a moveable divider board, each hive using eleven 14×12 frames.

**Pros:** Easy to inspect bees with accessible inspection tray, comfortable height, light supers (each contains 5 frames), good sized brood chamber (can be extended up to 22 frames), easy to use wasp guard, triple insulation, mesh floor ventilation, good swarm management system, less assembly, no problems with woodpeckers, comes with a liquid smoker so no worries about smoker going out.

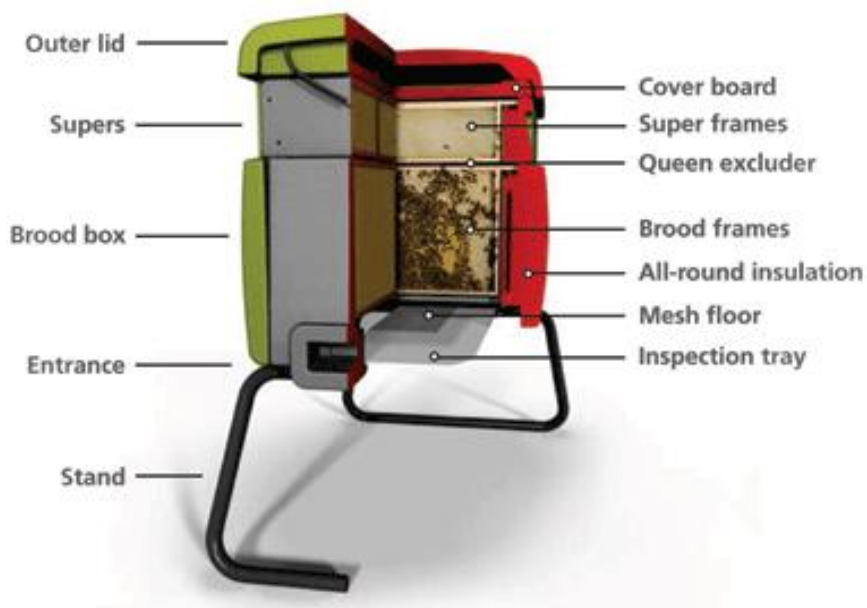
**Cons:** Best suited to the hobby beekeeper who does not have much space for equipment.

Cannot use a blow torch on it.

Having to put up with negative comments from some traditional beekeepers.

No. of cells in brood box: 75,000 (good)

## Member Sarah Heilbron's Beehaus.





## Top Bar Hive

**Summary:** This is a more “natural” approach to keeping bees  
Developed as a lower-cost hive for Africa because of its simple construction and cost. For example 8 Top Bar Hives can be made for the cost of one of our traditional hives!  
Does not need foundation, the bees build the comb so it hangs down from the top bar.  
Expands horizontally, not vertically.  
Advocated by some as a more natural method of beekeeping.

**Pros:** Low cost, ergonomic, simpler system, more time to observe bees, produces perfect, “wild” honeycomb.

**Cons:** Difficult to remove dead bees which collect on the floor of the hive, also difficult to manage varroa.  
It does not produce as much honey.  
Much messier honey extraction.  
Not being the standard method in the UK is difficult to learn the system.

Member Bridget Tyler owns a Top Bar Hive,



similar to the one above.

## Fixed Single Brood Observation Hive

**Summary:** A must for the bee-shed!

**Pros:** Excellent for learning, generating interest in beekeeping, and generally seeing all the day-to-day activity in the hive whilst bees are not agitated from an inspection.  
The queen can be used in reserve should one of your main colonies become queenless.

**Cons:** Single brood frame makes successful over wintering unlikely.  
Need feeding more regularly than normal hives.  
Glass prone to wax build up on the inside.  
No. of brood cells: 4,300  
Total no of cells 8,600

Member Sarah Rapley set up this Observation Hive in spring 2012.



# Portable Nucleus Observation Hives

**Member John Farrow built this conversion to add to his existing Nucleus Box. [see bottom picture]**

**Summary:** The Hive shown is available from Thorne's for over £300. However if you already have a 5 frame wooden nucleus hive this can easily be made into this portable observation hive by constructing this super structure shown on the RHS.

John Farrow made the conversion below  
[painted green] for £20 which was the cost  
of the glass, catches & 20mm clear entrance  
tubing. [the timber was from off cuts]

**Pros:** the hive is easy to transport unlike its slimmer alternative above.

It has a total of six deep frames which give a large amount of storage for honey & pollen in the nucleus box. Frames can be rotated to increase amount of brood, if required to increase colony size.

The bees, in the nucleus body, work to process the nectar & pollen to service the queen & brood above the queen excluder. It can also be restored back to a nucleus box to get it through the winter.

In an emergency, the queen can be used should one of your main colonies become queenless.

Double glazing will help maintain the brood temperature, on cold nights.

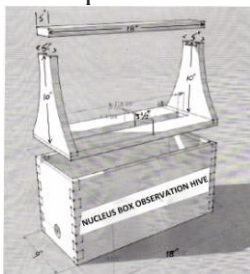
**Cons:** The bees can easily propolise all the edges of the glass making it difficult to remove for cleaning.

A possible solution could be to use a hair dryer to soften these propolised surfaces, so that the glass can be removed for cleaning?

No. of brood cells: 4,300

Total no of cells 30,000

These plans for this conversion are available



as a pdf document under 'ARTICLES'.





<b>Polystyrene Nucleus Hive</b>	<b>Member Sarah Rapley's Nucleus Hive.</b>
<p><b>Summary:</b> Good – advise buying the additional 14x12 eke and a couple of spare flexible crown boards. Cutting a hole in one of these will enable feeding throughout the winter if desired. Needs a brick or heavy tile on the roof to secure from wind. Holds 5 or 6 BS brood frames, for National and WBC hives.</p> <p>A very useful addition as it can provide a spare queen if one of your colonies goes queenless.</p> <p><b>Pros</b> – Costs only £29.50. Well insulated, and comes with Open Mesh Floor.</p> <p>Its insulation properties make it especially suitable for nucs. and small colonies as fewer bees are required to maintain the heat required for effective brood rearing.</p> <p><b>Cons:</b> Integral feeder prone to fermenting or mould if the bees do not finish the liquid feed. It is also difficult to empty it without tipping the hive upside down. Wooden float needs waxing to prevent mould discolouring it black.</p> <p>No. of cells in brood box: 25,800</p>	<div data-bbox="651 311 1034 698" data-label="Image"> </div> <div data-bbox="651 728 1034 1120" data-label="Image"> </div> <p data-bbox="1042 1093 1353 1126">N.B. Frames not supplied.</p>
<b>Warre' Hive</b>	<b>Member Calista Dickinson's Warre' Hive.</b>
<p><b>Summary:</b> Hive developed in the early 20th century by Emile Warre as an easy to manage beehive with which everyone could have success (known as the peoples' hive).</p> <p><b>Pros:</b> Low maintenance, simpler system, minimal disturbance to bees and hive, boxes are added to the bottom as the bees fill each box and honey is harvested from the top only when there are sufficient full boxes below. No queen excluder. Hands off approach Warre recommends only opening the hive once a year at harvest.</p> <p><b>Cons:</b> It does not produce as much honey. Top bars instead of frames so individual manipulation more difficult. Extracting the surplus honey is difficult and messy, as there are no wired frames to allow the honey to be spun out in the traditional way. Less hands on more observation. Not being the standard method in the UK is difficult to learn the system.</p> <p>No of cells per Brood Box 38,000 small although hive can have up to 4 brood boxes.</p>	<div data-bbox="646 1556 1528 2051" data-label="Image"> </div>